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| APPLICATION NO.   | FILING DATE                | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|----------------------------|----------------------|---------------------|------------------|
| 10/599,557  | 10/02/2006                 | Gerard Herman Hotho  | NL 040657           | 1828             |
| 24737 7590 03/04/2009 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 |                            |                      | EXAMINER            |                  |
|   |                            |                      | JACKSON, JAKIEDA R  |                  |
| BRIARCLIFF  | BRIARCLIFF MANOR, NY 10510 |                      | ART UNIT            | PAPER NUMBER     |
|   |                            |                      | 2626                |                  |
|   |                            |                      |                     |                  |
|   |                            |                      | MAIL DATE           | DELIVERY MODE    |
|   |                            |                      | 03/04/2009          | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|  | Application No.                    | Applicant(s)          |  |  |  |
|--|------------------------------------|-----------------------|--|--|--|
| Office Action Comments   | 10/599,557                         | HOTHO ET AL.          |  |  |  |
| Office Action Summary  | Examiner                           | Art Unit              |  |  |  |
|  | JAKIEDA R. JACKSON                 | 2626                  |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply   | ears on the cover sheet with the c | orrespondence address |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |                                    |                       |  |  |  |
| Status   |                                    |                       |  |  |  |
| 1) Responsive to communication(s) filed on   |                                    |                       |  |  |  |
|  | -·<br>action is non-final.         |                       |  |  |  |
| ·—   | , <u> </u>                         |                       |  |  |  |
| closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  |                                    |                       |  |  |  |
| dissect in assertation with the practice and in E.   | x parte quayre, 1000 0.D. 11, 10   | 0 0.0.210.            |  |  |  |
| Disposition of Claims  |                                    |                       |  |  |  |
| <ul> <li>4)  Claim(s) 1-13 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1-13 is/are rejected.</li> <li>7)  Claim(s) is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or election requirement.</li> </ul>   |                                    |                       |  |  |  |
| Application Papers   |                                    |                       |  |  |  |
| 9) ☐ The specification is objected to by the Examiner.  10) ☑ The drawing(s) filed on <u>02 October 2006</u> is/are: a) ☑ accepted or b) ☐ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |                                    |                       |  |  |  |
| Priority under 35 U.S.C. § 119   |                                    |                       |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>  |                                    |                       |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date  4) Interview Summary (PTO-413)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application  Other:  |                                    |                       |  |  |  |

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## **DETAILED ACTION**

## Claim Objections

- 1. Claim 6 is objected to because of the following informalities:
  - claim 6, line 2 "to process to generate" is not grammatical English. Appropriate
    correction is required also for other areas where this phrase is mentioned (e.g. in
    the specification page 3, line 18)

## Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. **Claims 1-13** are rejected under 35 U.S.C. 102(e) as being anticipated by Craven et al. (USPN 7,193,538), hereinafter referenced as Craven.

Regarding **claim 1**, Craven discloses a multi-channel encoder (5; 15) operable to process input signals conveyed in a plurality of input channels (CH1 to CH3; 400 to 450) (channels) to generate corresponding output data comprising down-mix output signals (downmix) (610, 620) together with complementary parametric data (600), the encoder (5; 15; abstract) including:

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(a) a down-mixer for down-mixing the input signals (CH1 to CH3; 400 to 450) to generate the corresponding down-mix output signals (610, 620) (downmix; column 6, lines 4-44); and

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(b) an analyzer (180) for processing the input signals (CH1 to CH3; 400 to 450), said analyzer (180) being operable to generate said parametric data complementary to the down-mix output signals (610, 620) (downmix), said encoder being operable when generating the down-mix output signals to allow for subsequent decoding (decode) of the down-mix output signals for predicting signals of channels processed and then discarded within the encoder (encoder; column 6, lines 4-44 with column 7, lines 5-16).

Regarding **claim 2**, Craven discloses a multi-channel encoder (5; 15) according to claim 1, said encoder (5;15) being operable to process the input signals (CH1 to CH3; 400 to 450) on the basis of time/frequency tiles (frequency; column 21, lines 5-20).

Regarding **claim 3**, Craven discloses a multi-channel encoder (5; 15; (encoder)) according to claim 2, wherein the tiles are defined either before or in the encoder (5; 15) during processing of the input signals (CH1, to CH3; 400 to 450) (column 21, lines 5-20).

Regarding **claim 4**, Craven discloses a multi-channel encoder (5; 15) according to claim 1, wherein the analyzer is operable to generate at least part of the parametric data (C.sub.1,iC.sub.2i) by applying an optimization of at least one signal (signal) derived from a difference between one or more input signals (difference) and an estimation of said one or more input signals which can be generated from output data

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(600, 610, 620) from the multi-channel encoder (5; 15) (column 2, line 65 – column 3, line 3).

Regarding **claim 5**, Craven discloses a multi-channel encoder (5; 15) according to claim 4, wherein the optimization involves minimizing an Euclidean norm (Euclidean; column 10, lines 21-55).

Regarding **claim 6**, Craven discloses a multi-channel encoder (5; 15) according to claim 1, wherein there are N input channels (channels) which the analyzer is operable to process to generate for each time/frequency tile the parametric data, the analyzer being operable to output M(N-M) parameters together with M down-mix (downmix) output signals for representing the input signals (CH1 to CH3; 400 to 450) in the output data (600, 610, 620); M and N being integers and M<N (column 6, lines 4-44).

Regarding **claim 7**, Craven discloses a multi-channel encoder (5; 15) according wherein the integer M is equal to two such the output signals (signals) are susceptible to being replayed in two-channel stereophonic apparatus (DVD) and being coded by a standard stereo coder (column 6, lines 4-44).

Regarding **claim 8**, Craven discloses a signal processor (180) for inclusion in a multi-channel encoder (encoder), the processor (180) being operable to process (downmix) data in the multi-channel encoder (5; 15) for generating its down-mix output signals and parametric data (column 6, lines 4-44).

Regarding **claim 9**, it is interpreted and rejected for similar reasons as set forth in claim 1.

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Regarding **claim 10**, Craven discloses an encoded output data (600, 610, 620) generated according to the method of claim 9, said output data (600, 610, 620) stored on a data carrier (storage medium; column 6, lines 62-67).

Regarding **claim 11**, Craven discloses a multi-channel decoder (10; 18) for decoding output data generated by an multi-channel encoder (5; 15) according to claim 1, the decoder (10; 18) comprising:

- (a) processing means for receiving down-mix output signals (610, 620) (downmix) together with parametric data (600) from the encoder (5; 15), the processing means being operable to process the parametric data to determine one or more coefficients or parameters (column 6, lines 4-44); and
- (b) computing means for calculating an approximate representation of each input signal encoded into the output data using the parameter data (computational) and also the one or more coefficients determined in step (a) for further processing to substantially regenerate representations (1400 to 1420) of input signals (CH1 to CH3) giving rise to the output data (600, 610, 620) generated by the encoder (5; 15) (column 6, lines 4-44).

Regarding **claim 12**, Craven discloses a signal processor for use in a multichannel decoder, said signal processor (processor) being operable to assist in processing data in association with regenerating representations of input signals (signals; column 24, lines 19-37).

Regarding **claim 13**, it is interpreted and rejected for similar reasons as set forth in claim 11.

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## Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAKIEDA R. JACKSON whose telephone number is (571)272-7619. The examiner can normally be reached on Monday-Friday from 5:30am-2:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 571-272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David R Hudspeth/ Supervisory Patent Examiner, Art Unit 2626

/Jakieda R Jackson/ Examiner, Art Unit 2626 February 26, 2009